

December 4, 2002

D.T.E. 00-65-A

Joint Petition of Massachusetts Electric Company and Nantucket Electric Company for approval by the Department of Telecommunications and Energy of a three year Energy Efficiency Plan covering the period 2000-2002.

---

APPEARANCE: Amy G. Rabinowitz, Esq.  
25 Research Drive  
Westborough, MA 01582  
FOR: Massachusetts Electric Company  
and Nantucket Electric Company  
Petitioner

ORDER ON COMPLIANCE FILINGI. INTRODUCTION

On May 18, 2001, the Department of Telecommunications and Energy (“Department”) directed Massachusetts Electric Company and Nantucket Electric Company (“Company” or “MECo”) to file an updated energy efficiency budget and specific performance incentive goals for 2002. Massachusetts Electric Company/Nantucket Electric Company, D.T.E. 00-65, at 8 (2001). On May 31, 2002, the Company filed its Energy Efficiency Plan 2002 Update (“Update”).<sup>1</sup> On June 12, 2002, the Commonwealth of Massachusetts, Division of Energy Resources (“DOER”), pursuant to G.L. c. 25A, § 11G and the Order Promulgating Final Guidelines to Evaluate and Approve Energy Efficiency Programs, D.T.E. 98-100 (2000) (“D.T.E. 98-100” and “Guidelines”), reported that the Update is substantially consistent with the statewide energy efficiency goals and DOER’s Guidelines for energy efficiency programs, and therefore approved the Update (“DOER Report”).

On July 23, 2002, the Department issued a notice requesting comments on the Update. No comments were filed. The Company responded to five Department information requests. On September 25, 2002, pursuant to the Guidelines at § 1(2), MECo filed a motion requesting approval of a performance incentive calculation and rate that differs from the method proposed in the Guidelines at § 5 (“Motion”).<sup>2</sup> On September 27, 2002, DOER filed a report (“DOER

---

<sup>1</sup> On June 13, 2002, MECo submitted a revised Update to corrected a typographical error in the Update. Hereinafter, when we refer to “Update,” it means the May 31, 2002 filing, as amended by the update filed on June 13, 2002.

<sup>2</sup> On its own motion, the Department moves the Update (as revised on June 13, 2002), and MECo’s five responses to Department information requests into the record of this  
(continued...)

Letter”) with the Department stating that with the revised shareholder incentive proposal, the Update remains substantially consistent with the statewide energy efficiency goals and DOER’s Guidelines for energy efficiency programs.

## II. STANDARD OF REVIEW

The Department is required to ensure that energy efficiency activities are delivered in a cost-effective manner utilizing competitive procurement processes to the fullest extent practicable. G.L. c. 25, § 19; G.L. c. 25A, § 11G. The Department has established Guidelines that, among other things, set forth the manner in which the Department would review ratepayer-funded energy efficiency plans in coordination with DOER, pursuant to G.L. c.25, § 19 and G.L. c.25A, § 11G. D.T.E. 98-100 (2000).

DOER has the authority to oversee and coordinate ratepayer-funded energy efficiency programs, consistent with specified goals, and is required to file annual reports with the Department regarding proposed funding levels for said programs. G.L. c. 25A, §11G; 225 C.M.R. §§ 11.00 et seq. If the DOER report concludes that ratepayer-funded energy efficiency programs are consistent with state energy efficiency goals, and if no objection to the DOER report is raised, the Department’s review of the Plan is limited to cost-effectiveness issues and the use of competitive processes. D.T.E. Guidelines at § 6.2; 225 C.M.R. § 11.2.

---

<sup>2</sup>(...continued)

proceeding. The responses are marked as Exhs. DTE-5-1 through DTE-5-5. The Department also incorporates by reference into the record of this proceeding the DOER Report and the DOER Letter. 220 C.M.R. § 1.10(3).

### III. UPDATE

#### A. Cost-Effectiveness

The Update proposes an overall energy efficiency program budget of approximately \$47.6 million in 2002 (Update at 2). The budget provides for an additional \$3.46 million in shareholder incentives based on actual performance compared to 33 goals for 2002 (id., App. B).<sup>3</sup> The Update provides for energy efficiency programs for residential and business customers, including, among other things, various initiatives to transform markets for energy efficiency products and also programs to capture savings during new construction, major renovation, and equipment replacement (id. at 4-21).

MECo expects benefit/cost (“B/C”) ratios for its 2002 residential programs to average 1.68 and for commercial programs to average 1.50 (id., App. C). MECo’s Energy Efficiency Budget and planned B/C ratios are summarized in Table 1 attached to this Order, which shows that the anticipated B/C ratios for MECo’s various programs or groups of programs all exceed 1.03 (id.). Overall, MECo expects the average B/C ratio for its 2002 program to be 1.57 (id.).

#### B. Motion for Revised Performance Incentive

##### 1. MECo’s Position

MECo’s shareholder incentive is currently tied to the rate on three-month Treasury bills (“T-bill rate”). DTE Guidelines at § 5.3. MECo states that very low T-bill rates in the last year or more, over which the Company has no control, do not “allow for a performance incentive that can motive the company in a meaningful way” (Motion at 2). MECo, pursuant to

---

<sup>3</sup> MECo’s 2000-2002 Plan estimated a budget of \$47.18 million for 2002, plus \$5.63 million in shareholder incentives. D.T.E. 00-65, Table 1.

the Guidelines at § 1(2), proposes that the incentive calculation algorithm be modified for 2002 (Motion at 2; Update at 28-29). MECo proposes a target after-tax shareholder incentive of 4.25 percent of its overall budget for 2002, based on successfully achieving 33 design level performance goals (Motion at 2; Update, App. B). MECo asserts that the proposed 4.25 percentage shareholder incentive is higher than the 1.87 percent average T-bill rate over the last 12 months, but lower than the 7.14 percent average incentive that MECo has earned over the most recent five years (Motion at 2; Exh. DTE-5-1). MECo states that with its proposed incentive levels, its programs are actually slightly more cost-effective than with incentives set at the T-bill rate (Exh. DTE-5-1). MECo notes that all stakeholders in the Company's Energy Efficiency Programs support the Motion (Motion at 1).<sup>4</sup>

## 2. DOER Letter

DOER supports the Company's proposal to revise the performance incentive (DOER Letter at 2). DOER concludes that the proposal is adequate to motivate the Company to pursue the highest quality programs for ratepayers, as envisioned by the Legislature (id.). DOER believes that the present T-bill rate, which is no longer 4 to 6 percent (the rate of return on low-risk investments cited in D.T.E. 98-100), but around 1.7 percent, will not adequately motivate the Company to provide high quality energy efficiency programs (id.). Therefore, DOER recommends that the Department allow MECo's proposed method to calculate the Company's 2002 shareholder incentive, pursuant to the DTE Guidelines, § 1(2) (id.).

---

<sup>4</sup> These stakeholders include the Northeast Energy Efficiency Council; the Energy Consortium; Action, Inc.; Massachusetts Energy Directors Association; Low-Income Energy Affordability Network; Massachusetts Community Action Association; Massachusetts Senior Action Council; and the Cape Organization for Rights of the Disabled (Motion at 1).

#### IV. ANALYSIS AND FINDINGS

##### A. Cost-Effectiveness

MECo provided expected B/C ratios for its proposed program for the year 2002 to show that its program, as a whole, has an expected B/C ratio of 1.57 and B/C ratios for the individual programs of at least 1.04. An Energy Efficiency Program shall be deemed cost-effective if its benefits are equal to or greater than its costs, as expressed in present value terms. DTE Guidelines at § 3.5. The Department has reviewed the method by which the Company determined the benefits and costs for the Update and finds that the benefits and costs were determined consistent with Department criteria for establishing program cost-effectiveness. See DTE Guidelines, §§ 3-4. Therefore, the Department concludes that MECo's proposed program for 2002, as a whole, is cost-effective.

We note that the B/C ratio for the Company's Residential Conservation Service ("RCS") program is less than one (Update at App. C). The Company has stated that there may be some resource and/or non resource benefits for RCS that have not been quantified, and that the RCS program is transitioning from an education only program to a program that provides incentives for energy efficiency investments (Exh. DTE -5-5). In transitioning the RCS programs, the Department directs MECo, in consultation with DOER, to improve the cost effectiveness of this program.

##### B. Competitive Procurement

In D.T.E. 00-65, the Department found that MECo's Plan provides for competitive procurement to the fullest extent practicable. Id. at 7. Based on its review of the Update, the Department finds that MECo's competitive procurement practices for its energy efficiency

programs have not changed in any significant way (See Update, App. A at 6; Exh. DTE-5-2). Therefore, the Department finds that the Update provides for competitive procurement to the fullest extent practicable.

C. Motion

When an entity seeking Department approval of its Plan requests a different method from that specified in the Guidelines, the burden falls on that entity to demonstrate the compelling nature of such a request. DTE Guidelines, § 1(2). MECo has requested a different method to calculate its incentive for the 2002 program year. The Department has recognized that the size of an incentive must balance promoting good program management with benefitting ratepayers by directing most of the budget to program implementation. See, Order Promulgating Proposed Guidelines to Evaluate and Approve Energy Efficiency Programs, D.T.E. 98-100, at 37 (1999). DOER, the agency charged by the Legislature with much of the oversight of energy efficiency programs, has agreed that offering an incentive is needed to motivate companies to manage their energy efficiency programs well. Id. at 35. DOER maintained that an incentive of four to six percent, equal to a three to four percent riskless real rate of return plus an inflation rate of one to two percent, would be sufficient to motivate electric companies to manage energy efficiency programs well. Id. at 36. DOER stated that the then-recent T-bill rate fell in the required four to six percent range. Id.

In choosing the T-bill rate for the DTE Guidelines, the Department considered DOER's advice that the T-bill rate would approximate the riskless rate required to motivate electric companies to manage energy efficiency programs well. In this proceeding, the Company and DOER have made it clear that the T-bill rate is now much lower than the rate recommended by

DOER in D.T.E. 98-100. While the proposed 4.25 percent target exceeds the rate now implicit in the DTE Guidelines, it is not only lower than the percentage the Company earned in recent years, it is near the low end of the range that DOER three years ago deemed sufficient to induce electric companies to manage programs well. The Department reaffirms that an incentive must be large enough to promote good program management, but small enough to leave almost all of the money to directly serve customers. The Company's proposal balances these two objectives and is consistent with DOER information that the Department used in writing the Guidelines. Accordingly, the Department grants the Company's request for an exception to the DTE Guidelines for the calendar year 2002.

D. Benefits of Market Transformation Programs

In calculating the benefits of market transformation programs, the Department has directed companies to include savings from equipment projected to be installed, due to a program, after a program ends. DTE Guidelines, §§ 4.2.1(b) and 4.2.2(b). In a similar case where projections also strongly influence B/C ratios, the Department has required companies to measure how accurate projected equipment lifetimes have turned out to be, using observations several years later of actual equipment lifetimes and failure rates. See e.g., Massachusetts Electric Company, D.P.U. 90-261 (1991) at 111; Massachusetts Electric Company, D.P.U. 95-6-CC, at 14-32 (1995). Therefore, the Department will require companies to track actual equipment installations or sales after a market transformation program ends and compare those to their earlier projections of the same. Companies may also track and report other measures of market transformation, such as changes in building or equipment efficiency codes, models offered by manufacturers, or emergence of significant new market players.



E. Conclusion

As noted, the DOER Report and DOER Letter concluded that the Update is substantially consistent with DOER's statewide energy efficiency goals. The Department found above that the Company's 2002 Update is cost-effective and provides for competitive procurement to the fullest extent practicable. Accordingly, the Department approves the Company's 2002 Update.

Finally, the General Court has mandated that funding for energy efficiency programs continue through 2007. G.L. c. 25, § 19. Accordingly, the Department directs the Company to file its Plan for its future energy efficiency activities by December 16, 2002.

V. ORDER

Accordingly, after due notice, opportunity for public comment, and consideration, it is hereby

ORDERED: That the Petition of Massachusetts Electric Company and Nantucket Electric Company for approval of the Update to their energy efficiency plan is APPROVED; and it is

FURTHER ORDERED: That Massachusetts Electric Company and Nantucket Electric Company follow all other directives contained in this Order.

By Order of the Department,

---

Paul B. Vasington, Chairman

---

James Connelly, Commissioner

---

W. Robert Keating, Commissioner

---

Eugene J. Sullivan, Jr., Commissioner

---

Deirdre K. Manning, Commissioner

**TABLE 1. MEdCo Energy Efficiency Budget (\$000) and Planned Benefit/Cost Ratios**

	<b>2002</b>	
	<b>Budget</b>	<b>B/C Ratio</b>
<b>Residential, Ordinary</b>		
New Construction (Energy Star Homes)	<b>2,008</b>	<b>2.21</b>
In-Home Services		<b>1.04</b>
Energy Wise	<b>4,104</b>	
RCS	<b>2,947</b>	
Products and Services		
Lighting	<b>2,219</b>	<b>2.07</b>
Energy Star Appliances	<b>1,429</b>	<b>1.08</b>
Home Energy Management (Water Heater Control)	<b>555</b>	<b>1.69</b>
Load Response Pilot	<b>117</b>	<b>NA</b>
<b>Subtotal Residential, Ordinary</b>	<b>13,379</b>	<b>1.42</b>
<b>Low-Income</b>		
New Construction	<b>287</b>	<b>1.33</b>
In-Home Services	<b>6,643</b>	<b>2.27</b>
Products & Services (Lighting)	<b>250</b>	<b>2.43</b>
<b>Subtotal Low Income</b>	<b>7,180</b>	<b>2.25</b>
<b>Total Residential</b>	<b>20,559</b>	<b>1.68</b>
<b>Commercial / Industrial</b>		
Design 2000+	<b>12,396</b>	<b>1.72</b>
Energy Initiative	<b>9,645</b>	<b>1.33</b>
Small C&I	<b>4,207</b>	<b>1.43</b>
Load Response Pilot	<b>284</b>	<b>NA</b>
<b>Total Commercial/Industrial</b>	<b>26,532</b>	<b>1.50</b>
Misc. Planning & Evaluation	<b>480</b>	
Shareholder Incentive	<b>3,463</b>	
<b>TOTAL BUDGET</b>	<b>51,033</b>	<b>1.57</b>

Source: Update at 2 and Update, App. C, at 1